CLAIMS

What is claimed is:

Sub A₁)

1 1.   An imaging system comprising the following:
2 firmware associated with the imaging system;
3   a communications device adapted and constructed to facilitate
4 communication between the imaging system and a remote source of
5 information; and
6   an automatic remote firmware update mechanism adapted to
7 selectively and automatically retrieve firmware upgrade information from the
8 remote source of information via the communications device, and to selectively
9 and automatically install the firmware upgrade information into the firmware of
10 the imaging system.

1 2.   An imaging system according to claim 1, wherein the
2 automatic remote firmware update mechanism comprises a part of firmware
3 installed in the imaging system.

1 3.   An imaging system according to claim 1, wherein the
2 communications device is selected from a group consisting of a modem and a
3 network interface card.

1 4.   An imaging system according to claim 3, wherein the
2 communication device further comprises means for connecting to, and accessing
3 information from, a web site.

1 5.   An imaging system according to claim 1, further comprising
2 the following:
3   flag means for storing a value corresponding to an update trigger
4 parameter;

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5   flag parameter update means for incrementally increasing the

6   update trigger parameter in response to a sensed condition; and

7   trigger means for actuating the automatic remote firmware update

8   mechanism to automatically retrieve firmware upgrade information when the

9   update trigger parameter reaches a predetermined update value.

1   6.   An imaging system according to claim 5, wherein the flag

2   parameter update means incrementally increases the update trigger parameter

3   value in response to page count through the imaging system.

1   7.   An imaging system according to claim 5, wherein the flag

2   parameter update means incrementally increases the update trigger parameter

3   value in response to the passage of a predetermined amount of time.

1   8.   An imaging system according to claim 5, further comprising

2   means for periodically checking the update trigger parameter.

1   9.   An imaging system according to claim 1, further comprising

2   means for comparing downloaded firmware upgrade information to existing

3   firmware to determine the necessity of installing the downloaded firmware

4   upgrade information.

1   10.   An imaging system according to claim 1, further comprising

2   means for notifying a system user when firmware is to be upgraded.

1   11.   In an imaging system including firmware and a

2   communications device adapted and constructed to facilitate communication

3   between the imaging device and a remote source of information, a method of

4   updating firmware comprising the following steps:

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5   selectively and automatically retrieving firmware upgrade

6   information from the remote source of information via the communications

7   device; and

8   selectively installing the firmware upgrade information into the

9   firmware of the imaging system.

1   12.   A method according to claim 11, wherein the step of

2   retrieving firmware upgrade information comprises retrieving firmware upgrade

3   information from a web site.

1   13.   A method according to claim 11, further comprising the

2   following steps:

3   storing a value corresponding to an update trigger parameter;

4   sensing a condition;

5   incrementally increasing the update trigger parameter in response

6   to the sensed condition; and

7   actuating the automatic remote firmware update mechanism to

8   automatically retrieve firmware upgrade information when the update trigger

9   parameter reaches a predetermined update value.

1   14.   A method according to claim 13, wherein the step of

2   sensing a condition comprises sensing page count through the imaging system,

3   and the step of incrementally increasing the update trigger parameter comprises

4   incrementally increasing the update trigger parameter value in response to page

5   count through the imaging system.

1   15.   A method according to claim 13, wherein the step of

2   sensing a condition comprises sensing the passage of time, and the step of

3   incrementally increasing the update trigger parameter comprises incrementally

4   increasing the update trigger parameter value in response to the passage of a

5   predetermined amount of time.

1   16.   A method according to claim 13, further comprising the
2   step of periodically checking the update trigger parameter.

1   17.   A method according to claim 11, further comprising the step
2   of comparing downloaded firmware upgrade information to existing firmware to
3   determine the necessity of installing the downloaded firmware upgrade
4   information.

1   18.   A method according to claim 11, further comprising the step
2   of notifying a system user when firmware has been upgraded.

1   .19.   A printer comprising the following:
2   firmware installed in the printer;
3   a telecommunications device adapted and constructed to facilitate
4   communication between the printer and a web site containing firmware upgrade
5   information; and
6   an automatic remote firmware update mechanism adapted to
7   selectively and automatically retrieve firmware upgrade information from the
8   web site via the telecommunications device, and to selectively and automatically
9   install the firmware upgrade information into the firmware of the printer.

1   20.   A printer according to claim 19, wherein the automatic
2   remote firmware update mechanism adapted to selectively and automatically
3   download firmware update image files from the web site.